SPC (Y/N):

Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Reject Insp. Accept Reject Description **Work Center ID** Run Hours Code Qty Qty Number Stamp Draw Nbr **Revision Nbr** D3391 Ι 100 0.00 MORI SEIKI CNC LATHE LARGE \*100\* Mori Seiki Memo Rev: 1 & Dwg D3391 Rev: 1 Mori Seiki CNC Lathe Large Turn as per Folio FA599

Date:

Date:

110 QC2- Inspect parts off machine FAI/FAIB 0.00 \*110\*

Date:

\*\*\*\*REMOVE STEADY REST AND MACHINIG MARKS\*\*\*

QC 0.00 Memo Quality Control

**Approvals:** 

112 QC5- Inspect part completeness to step on W/O 0.00

\*110\* OC 0.00 Memo

Quality Control

Start

Stop

Page 1

26-80-H Q

DQA:			Date:											ΔRT
						WORK ORDER NON	-CC	ONFO	RMANCE / U			_	A 5	ROSPACE
QA Closed:			Date:							w	ork Order up	date only		
NA / a mly O mala						DISPOSITION				AGAINST DE	PARTMENT	/PROCESS		
Work Orde	er: -	<u> </u>				Rework	1		Skid-tube	Crosstube	1	Water Jet	Engine	ering
Part N	In					Scrap	1		Machining	Small Fab	Pro	d. Eng. Coor.	_	uality
i dici						Use-as-is	1		noforming	Finishing	→	e/Packaging		Other
NCR N	lo.					Suspected Unapproved	1		Large Fab	Composite		Supplier	7	
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Root					Desc	ription of work order update	Ī	nitial	Act	ion	Sign &			
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Handling/Pre	$\Box$													
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Offset/Setup														
Process														
Supplier														
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Transport														
Unapproved														
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		Bending				Bend		1	rogram	_	Outside Dim		Pressure/	Forced
<b>i</b> .		Centre No	ot Concer	ntric		BOM/Route		Grain			Over/Under	tolerance	Set-up	
		Centre Not Concentric Cracks				Broken/Damage/Defect	L	Hardwa	ire		Part Incorred		<b>⊣</b> `	ture/Cure
		Crimp/Kink/Ripple/Wave			L.	Burrs	<u></u>	Inspect	ion Incomplete/Ur	nqualified	Part Lost/Mi	ssing	Weld	
		Cuffs				Contamination		4	ions Incomplete/U	Jnclear	Part Moved	L	Wrong St	ock Pulled
	Crushing					Countersink	<u></u>	4	ned/off center		Positioned V		_	
	Heat Treat					Cut Too Short		Mislabe	eled		Power Loss/	Surge	Other	
		Inspection Strip in Tube			Drawing		Misread	t				···		
		Marks/Ch	natter			Drill Holes		Off-set						
		Turning S	equence			Finish	$\Box$	4	Calibration				·-·	<u> </u>
		Wave/Tu	ist in Tub	ne .		Fit/Function	1	Out of 9	Sequence					

<b>Work Ord</b> <i>June-03-14 7:1</i>		20029		*120	N29*							Page 2
Item ID: Revision ID:	D3391-025			Accept	*N900	<u>040</u> 1	100	)*	Setup	Start Stop	*N	S1*
Item Name: Start Date: Required Date: Reference:	Aft Tube Ass 6/03/14 6/03/14	Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*		Cust Item l Customer:	D:					^IV.	S2*
Approvals:	Process Pla	an:	Date:	Tooling: SPC (Y/N):	· · · · · · · · · · · · · · · · · · ·	ate:		]		Start Stop	*N *N	R1* R2*
Sequence ID/ Work Center II 120 *1 On* HAAS 1 HAAS CNC vertical		Operation Description  HAAS CNC VERTICAL  Memo  1-Machine a 2-Deburn		Set Up/ Run Hours 0.00  0.00  A Dwg D3391 Rev:	Tool ID		Plan Code	Accept Qty	Rejec Qty		Reject Tumber	Insp. Stamp
130 *130* QC Quality Control		QC2- Inspect parts off m	achine FAI/FAIB	0.00	A DIH	10/12		.1			•	<del></del> .
140		QC8- Inspect parts - seco	and check	0.00								DAS

0.00

Memo

\*\*\*INSPECT INSIDE BORE\*\*\*

\*140\*

Quality Control

DQA:			Date:			_								TO ACT
						WORK ORDER NON-	-C(	ONFO	RMANCE / UPD					AEROSPACE
QA Closed:		_	Date:							W	ork Order up	date only		
Work Orde	or.					DISPOSITION				AGAINST DE	PARTMENT	PROCESS		
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	-					Use-as-is		Thern	noforming	Finishing	Rec/Stor	e/Packaging		Other
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	Ш	Bending				Bend	<u> </u>	1	rogram	<u> </u>	Outside Dime		_	Pressure/Forced
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	-	Centre Not Concentric Cracks			<u> </u>	Broken/Damage/Defect	<u> </u>	Hardwa	re	<u> </u>	Part Incorred		-	Temperature/Cure
	Crimp/Kink/Ripple/Wave			/Wave		Burrs		Inspecti	on Incomplete/Unqu	alified	Part Lost/Mi:	ssing	-	Weld
	Cuffs					Contamination		4	ions Incomplete/Unc	lear	Part Moved		<u></u>	Wrong Stock Pulied
	Crushing					Countersink	-	•	ned/off center	<u></u>	Positioned W	-		
	Heat Treat			<u> </u>	Cut Too Short	_	Mislabe			Power Loss/S	Surge		Other	
	Inspection Strip in Tube			Tube	<u> </u>	Drawing		Misread	i					
	Marks/Chatter					Drill Holes		Off-set						
		Turning S	equence			Finish		Out of 0	Calibration					
	Turning Sequence Wave/Twist in Tube			e	1	Fit/Function		Out of S	Sequence					

Work Order ID 120029 \*120029\* Page 3 June-03-14 7:12:13 AM Item ID: D3391-025 Accept \*N900040100\* Setup Start **Revision ID:** Aft Tube Assembly **Item Name:** \*1\* Start Qty: 1.00 **Start Date:** 6/03/14 **Cust Item ID:** Required Date: 6/03/14 Req'd Qty: 1.00 \*1\* **Customer:** Reference: Run Process Plan: Date:\_\_\_\_\_ Tooling: **Approvals:** Date: Stop Date:\_\_\_\_ SPC (Y/N): Date: Set Up/ Sequence ID/ **Operation** Tool ID Tool # Plan Reject Reject Accept Insp. **Description** Qty Number Stamp **Work Center ID** Qty **Run Hours** Code 150 0.00 14-10-14 Da Skidtubes \*150\* Skidtubes 0.00 Memo 1-Drill (PILOT HOLE) aft cap holes per Dwg D3391 using DT8803 Skidtubes 160 0.00

\*160\* CNC Bend 1

**BENDING MACHINE - SKIDTUBES** 

CNC Delta 100 Bender

Form as per Dwg D3391 Using Bend Prog 3391025

170

QC5- Inspect part completeness to step on W/O

0.00

\*170\*

Memo

0.00

**Quality Control** 

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H-4,25"

DQA:			Date:										TO A DT
						WORK ORDER NON-	-C(	ONFO	RMANCE / U	PDATE			AEROSPACE
QA Closed:			Date:							W	ork Order up	odate only	
						DISPOSITION		٠		AGAINST DE	PARTMENT	/PROCESS	
Work Orde	er: -					,	1		G1:14 - 15 - 1	Constant of the Constant of th	7	\4/atar (at	7
Down 8	۱_					Rework		Ι.	Skid-tube Machining	Crosstube Small Fab	Bro	Water Jet d. Eng. Coor.	Engineering Quality
Part N	10				<del></del>	Scrap Use-as-is		1	noforming	Finishing	<b>⊣</b>	re/Packaging	Other
NCR N	ıo					Suspected Unapproved		THETH	Large Fab	Composite	1 1100	Supplier	
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	_	Bending Centre Not Concentric			<u> </u>	BOM/Route		Grain			Over/Under	_	Set-up
	_	Cracks			Broken/Damage/Defect	<u> </u>	Hardwa			Part Incorred	<u> </u>	Temperature/Cure	
		Crimp/Kink/Ripple/Wave		<u> </u>	Burrs	<u> </u>	1	ion Incomplete/U	· ·	Part Lost/Mi	ssing	Weld	
		Crushing		<u> </u>	Contamination	-	4	ions Incomplete/	Unclear	Part Moved		Wrong Stock Pulled	
		Crushing Heat Treat		<u> </u>	Countersink	-	4 -	ned/off center	<u> </u>	Positioned V		ا ا	
		Heat Treat		<u> </u>	Cut Too Short	-	Mislabe		<u></u>	Power Loss/	Surge	Other	
	-	Inspection Strip in Tube		<u> </u>	Drawing	<u> </u>	Misread						
	$\overline{}$	Marks/Ch			<u> </u>	Drill Holes		Off-set					
		Turning S				Finish	<u> </u>	4	Calibration				
1. I		Wave/Tw	rist in Tub	)e	1	Fit/Function	ı	IOut of S	Sequence				

Item ID: Revision ID:	D3391-025	`		Accept	*N900	<u>040</u>	100	)*	Setup Start	*NS1*
Item Name:	Aft Tube Asse	embly							Stop	*NS2*
Start Date:	6/03/14	Start Qty: 1.00	*1*	<b>t</b>	Cust Item I	D:				
Required Date	e: 6/03/14	<b>Req'd Qty:</b> 1.00	*1*	<b>t</b>	<b>Customer:</b>					
Reference:										
Approvals:	Process Pla	ın:	Date:	Tooling:	Da	ate:	_	, ]	Run Start	*NR1*
•	QC:		_ Date:	<b>SPC (Y/N):</b>	Da	ate:	<u> </u>		Stop	*NR2*
Sequence ID/ Work Center	ID	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty		Reject Insp. Number Stamp
180		CI I I		0.00			•		-/	1/1 14 16
*120*		Skidtubes		0.00				0	<i>p</i> /	4-10-16
Skidtubes Skidtubes		Memo	cap pilot hole to .208	0.00	Ī			,	, /	1
\$7°		2-Drill float 3-Drill weat Wearplate J *****Do N	bag holes using DT86 rplate holes as per Dw ig . ot Open To Finished S	809 as per Dwg D3391(Holes r g D3391 using DT8878(Mid T	ube) & DT8217			A ST TO BE STONE	-	
			Irilled aft wearplate h		_					
		5-Open wea	rplate holes to 0.297"	and c'bore as per dwg D3391						
		6-Open up a	all float bag holes to 0.	328" and c'sink as per Dwg D3	3391.			ı		•
		7-Deburr								
		8- Scribe ba	tch # on fwd end							en e
*	<b>*</b>					~.	, }			

DQA:			Date:						_					TAART
OA Classel.			Data			WORK ORDER NON-	-C(	ONFO	RMANCE / UP		ork Order up	ndate only		AEROSPACE
QA Closed:			Date:								ork Order up	date only	<u> </u>	<del> </del>
Work Orde	er:					DISPOSITION				AGAINST D	PARTMENT	/PROCESS		
	•					Rework			Skid-tube	Crosstube	1	Water Jet		Engineering
Part N	١o.					Scrap			Machining	Small Fab	Pro	d. Eng. Coor.		Quality
	•					Use-as-is		Thern	noforming	Finishing	Rec/Stor	re/Packaging		Other
NCR I	No.					Suspected Unapproved			Large Fab	Composite	]	Supplier		
Root					Desc	ription of work order update		Initial	Acti	on	Sign &			<u> </u>
Cause		Date	Step	Qty		or non-conformance	Ch	nief Eng	Descri	ption	Date	Verification	1	QC Inspector
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	${f}$	Cracks			<u> </u>	Broken/Damage/Defect		Hardwa			Part Incorred	F	-	Temperature/Cure
	_	Crimp/Kink/Ripple/Wave			<u> </u>	Burrs		4 ·	ion Incomplete/Un	· -	Part Lost/Mi	ssing	_	Weld
	-	Crushing			_	Contamination	<u> </u>	4	ions Incomplete/U	nclear	Part Moved			Wrong Stock Pulled
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	-	Heat Treat			<u> </u>	Cut Too Short	<u> </u>	Mislabe			Power Loss/	Surge [		Other
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	-	Marks/Ch				Drill Holes		Off-set						
	${f}$	Turning S			<u> </u>	Finish	<u> </u>	4	Calibration					
	ıl	Wave/Tw	ist in Tub	16	ı	Fit/Function	l	IOut of 9	Sequence					

Work Order ID 120029 \*120029\* June-03-14 7:12:13 AM Item ID: D3391-025 Accept \*N900040100\* Setup Start **Revision ID:** Aft Tube Assembly **Item Name:** \*1\* 6/03/14 Start Oty: 1.00 **Start Date: Cust Item ID:** Required Date: 6/03/14 Req'd Qty: 1.00 \*1\* **Customer:** Reference: Run Process Plan: Date: **Tooling:** Approvals: Date: Stop QC: Date: SPC (Y/N): Date: Sequence ID/ **Operation** Set Up/ Tool ID Tool # Plan Reject Accept Reject **Work Center ID** Description Code Oty Number Stamp **Run Hours** Oty 190 QC5- Inspect part completeness to step on W/O 0.00 \*100\* 0.00 Memo Quality Control

200 \*200\* Chemical Conversion Coat per QSI005 4.1

Memo

0.00

0.00

HandFinish

Hand Finishing

210

**Quality Control** 

QC7-Inspect Chemical Conversion Coat

Memo

0.00

0.00

Page 5

Insp.

DQA:			Date:							DATE				<b>DART</b>
QA Closed:			Date:			WORK ORDER NON-	-C(	ONFOI	RMANCE / UP		ork Order up	odate only		AEROSPACE
						DISPOSITION				AGAINST DE	PARTMENT	/PROCESS		
Work Orde	er: _					·			<del></del> 1	<u>-</u>	· -	_	_	—
						Rework			Skid-tube	Crosstube	-	Water Jet	4	Engineering
Part N	۷o. <u>-</u>					Scrap			Machining	Small Fab	4	d. Eng. Coor.	$\dashv$	Quality
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	Crimp/Kink/Ripple/Wave			/Wave	<u> </u>	Burrs		4	ion Incomplete/Und		Part Lost/Mi	ssing	$\dashv$	Weld
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	-	Inspection Strip in Tube			Drawing	<u> </u>	Misread							
	-	Marks/Chatter		_	Drill Holes		Off-set							
	-	_	-			Finish	_	4	Calibration					
	l l	Turning Sequence Wave/Twist in Tube				Fit/Function	l	Out of S	Sequence					

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Work Ord June-03-14 7:1		20029		*120	1029*							Page 6	,
Item ID: Revision ID:	D3391-025			Accept	*N900	040	100	)*	Setup		*N	S1*	
Item Name:	Aft Tube Ass	embly								Stop	*N	S2*	
Start Date: Required Date Reference:	6/03/14 :: 6/03/14	Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*		Cust Item I Customer:	D:			_	<b>G</b> 4			
Approvals:	Process Pla	an:	Date:	Tooling:	Da	ate:	_	]	Run	Start	*N	R1*	
• •		### The state of t	Date:	SPC (Y/N):	Da	ate:				Stop	*N	R2*	
Sequence ID/ Work Center I 220	D	Operation Description Skidtubes		Set Up/ Run Hours 0.00	Tool ID	Tool#	Plan Code	Accept Qty	Rej Qty		Reject Number	Insp. Stamp	
*220* Skidtubes		Memo		0.00	_	_							
Skidtubes		1- Instal spa A/R Magna exp. date : _/ cure time 12	cers as per dwg D3391 abond 6398 Batch: 12 4-12-30 hrs as per QSI0015				14	1-10	Ó ~	Z	./		
		2- Grind cro											
			using #9 drill									पर्ये ।	*
		4- Touchup	Magnabond										

230

QC5- Inspect part completeness to step on W/O

0.00

Memo

5- Deburr

0.00

Quality Control

DQA:			_ Date:						•		•			DART
QA Closed:			Date:			WORK ORDER NON	-C(	ONFO	RMANCE / UP		Vork Order up	odate only		AEROSPACE
						DISPOSITION					EPARTMENT			
Work Ord	er:						.			_	, ¬			<del></del> 1
						Rework			Skid-tube	Crosstube	_	Water Jet	Щ	Engineering
Part I	No.					Scrap			Machining	Small Fab	<del></del>	d. Eng. Coor.	Н	Quality
NCR I	No.					Use-as-is Suspected Unapproved		Therr	noforming Large Fab	Finishing Composite	Rec/Stoi	re/Packaging Supplier		Other
Root					Desci	ription of work order update		Initial	Acti	on	Sign &			<del> </del>
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Descri	ption	Date	Verificatio	n	QC Inspector
Design														
Doc/Data														•
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Handling/Pre														
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		Cracks	ot concer	iti it		Broken/Damage/Defect	H	Hardwa	are		Part Incorred		$\vdash$	Temperature/Cure
		4	nk/Ripple	/Wave		Burrs	H	₹	ion Incomplete/Un	gualified  -	Part Lost/Mi		$\blacksquare$	Weld
		Crimp/Kink/Ripple/Wave Cuffs				Contamination	<u> </u>	4 '	tions Incomplete/U	· -	Part Moved		_	Wrong Stock Pulled
		Cuffs Crushing				Countersink	$\vdash$	4	gned/off center	-	Positioned V	ا Vrong		· ·
		Crushing Heat Treat			Cut Too Short		Mislabe			Power Loss/	1	$\Box$	Other	
	—	Heat Treat Inspection Strip in Tube				Drawing	Г	Misrea		_	<b>-</b>	-		
		Inspection Strip in Tube Marks/Chatter				Drill Holes	Г	Off-set						
		Turning S	equence			Finish		Out of	Calibration					
		Wave/Tw				Fit/Function		Out of	Sequence		_			

Work Orde		0029		*120	nn29*					Page 7
Item ID: Revision ID: Item Name:	D3391-025 Aft Tube Ass	embly		Accept	*N90004	4010	<b>N</b> *	Setup	Start Stop	*NS1* *NS2*
Start Date: Required Date: Reference:	6/03/14 6/03/14	Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*		Cust Item ID: Customer:					
Approvals:	Process Pla	an:	Date:	Tooling: _ SPC (Y/N):	Date: Date:_			Run	Start Stop	*NR1* *NR2*
Sequence ID/ Work Center II 235 *25* HandFinish Hand Finishing	)	Operation Description Pressure Wash per QS100  Memo AND REAL	05 4.3 ODINE AS PER PAR09-04:	Set Up/ Run Hours 0.00 0.00	Tool ID To	ool # Plan Code	Accep Qty	t Rej Qty		Reject Insp. Number Stamp
240 */240* Powdercoat Powder Coating		White Gloss(Ref:4.3.5.1)  Memo  START TIM  OVEN TEM  FINISH TIM	1988 · e: <u>840 ·</u> pebature: 320°	0.00				<u></u>	12	<u>/-//- 3.                                    </u>
250 <b>*250 *250 QC</b> Quality Control		QC3- Inspect Part Finish  Memo		0.00			. 1 (	_,	<u> </u>	DAS 15 9-89

250

Quality Control

DQA:			Date:											TOACT
						WORK ORDER NON-	-CC	ONFO	RMANCE / UPDATE					AEROSPACE
QA Closed:			Date:							W	ork Order up	odate only		
Work Orde	ır.					DISPOSITION			AGAINST	DE	PARTMENT	/PROCESS		
Work Orde	·'· –					Rework			Skid-tube Crosstube		1	Water Jet		Engineering
Part N	lo.					Scrap			Machining Small Fab	_	Pro	d. Eng. Coor.	$\neg$	Quality
	_					Use-as-is			noforming Finishing	-	4	re/Packaging		Other
NCR N	lo.					Suspected Unapproved			Large Fab Composite			Supplier		
								<u> </u>			- -			···
Root					Desc	ription of work order update		Initial	Action		Sign &			
Cause	4	Date	Step	Qty		or non-conformance	Ch	ief Eng	Description		Date	Verification	1	QC Inspector
Design	_													
Doc/Data	_												1	
Equip/Tooling	_													
Handling/Pre	4	]												
Material	_	1				İ								
Operator	_													
Offset/Setup													İ	
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Supplier	$\dashv$												j	
Training	$\dashv$												-	
Transport	$\dashv$												1	
Unapproved		·			<u> </u>			· ·	regory					
l andie						General	rA	OLI CAI	IEGORY			·····		
Landin [		ear Bending				Bend		Teolio/B	Program	Г	Outside Dim	ansions		Pressure/Forced
		_	t Cancar	atric		BOM/Route	-	Grain	Togram	-	Over/Under		_	Set-up
,		Centre Not Concentric				Broken/Damage/Defect	┢	Hardwa	ire.	<u> </u>	Part Incorrec		-	Temperature/Cure
-	_	Cracks Crimp/Kink/Ripple/Wave			-	Burrs		4	ion Incomplete/Unqualified		Part Lost/Mi		$\neg$	Weld
<u> </u>		Crimp/Kink/Ripple/Wave Cuffs			-	Contamination	_	4	tions Incomplete/Unclear		Part Moved	331116		Wrong Stock Pulled
<u> </u>	Cuffs Crushing					Countersink		4	ned/off center	<b>—</b>	Positioned V	ا Vrong		20 2.23 400
	Heat Treat					Cut Too Short	-	Mislabe			Power Loss/	-		Other
<u> </u>	Inspection Strip in Tube			Tube		Drawing	┝━	Misread	*		1. 5.1.5. 2000/			
					<u> </u>	Drill Holes	$\vdash$	Off-set	<del>,</del>			·	_	
<u> </u>	_	Marks/Chatter				Finish	$\vdash$	4	Calibration					
	-	Turning Sequence Wave/Twist in Tube				Fit/Function	Н	4	Sequence					

Work Ord June-03-14 7:1		0029		*120	1029*							Page 8	
Item ID: Revision ID: Item Name:	D3391-025 Aft Tube Asser	mbly		Accept	*N900	040	100	)*	Setup	Start Stop		S1* S2*	
Start Date: Required Date: Reference:	6/03/14	Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*		Cust Item l Customer:	D:					· I VI	.7/"	
Approvals:	Process Plan	n:	Date:	Tooling: SPC (Y/N):		ate:			Run	Start Stop	*N	R1* R2*	
Sequence ID/ Work Center II 260 *260* HandFinish Hand Finishing	D	2-Install Aft A/ R Sikafle Sikafler	erts as per Dwg D339 Cap as per Dwg D339 ex-241/-291 <u>N</u> (3 k expiry date: 1 s	01 027 102	Tool ID	Tool#	Plan Code	Accept Qty	t Reje Qty		Reject Number	Insp. Stamp	3
270 <b>*970*</b> QC Quality Control		QC5- Inspect part comple	eteness to step on W/C	0.00						and the second s		DAS 38 9-89	η

\*280\*

0.00 D412-742-043/131241(2 1x & Alludes

Packaging

280

Packaging

Memo

Identify as per dwg & Stock Location: W/O

DQA:			Date:											TAART
OA Classide			Date:			WORK ORDER NON-	-C(	ONFO	RMANCE / U		ork Order u	ndata anly	П	AEROSPACE
QA Closed:			Date.				_			VV	ork Order up	date only		
Work Ord	er:					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS		
	-					Rework			Skid-tube	Crosstube	1	Water Jet		Engineering
Part I	No.					Scrap			Machining	Small Fab	Pro	d. Eng. Coor.	П	Quality
	_					Use-as-is		Thern	noforming	Finishing	Rec/Sto	re/Packaging	П	Other
NCR I	۷o. <u>-</u>				<u> </u>	Suspected Unapproved			Large Fab	Composite	]	Supplier		
Root					Desc	ription of work order update		Initial	Acti	ion	Sign &			
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Descr	iption	Date	Verification	n	QC Inspector
Design														
Doc/Data														
Equip/Tooling														
Handling/Pre	Ш													
Material	Ш					·								
Operator						i								
Offset/Setup	Ш													
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Supplier	Ш													
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Unapproved												- 5-19		
·						***	FA	ULT CAT	regory					
Landi						General		1		<del></del>	۳	,		
	${f -}$	Bending				Bend		4	rogram		Outside Dim		-	Pressure/Forced
	-	Centre No	ot Concer	ntric		BOM/Route		Grain		<u> </u>	Over/Under	1	-	Set-up
	$\boldsymbol{\vdash}$	Cracks				Broken/Damage/Defect		Hardwa		<u></u>	Part Incorred		$\overline{}$	Temperature/Cure
	-	Crimp/Kir	nk/Ripple	/Wave		Burrs		1 .	ion Incomplete/Un	· -	Part Lost/Mi	ssing	-	Weld
	-	Cuffs	ı			Contamination		4	ions Incomplete/U	Inclear	Part Moved	l		Wrong Stock Pulled
,		Crushing				Countersink	$\overline{}$	4	ned/off center		Positioned V	_		
	$\boldsymbol{\vdash}$	Heat Trea				Cut Too Short		Mislabe		<u>L</u>	Power Loss/	Surge	<u></u>	Other
	$\boldsymbol{}$	Inspection		Tube	$\perp$	Drawing	_	Misread			<del></del>	<u></u> .		
	Ц	Marks/Ch	atter		<u> </u>	Drill Holes	_	Off-set						
	-	Turning S	•		<u> </u>	Finish		4	Calibration			·		
	Wave/Twist in Tube				Fit/Function	l	Out of Sequence							

Work Ord June-03-14 7:1		20029		*120				Page 9				
Item ID: Revision ID: Item Name:	D3391-025 Aft Tube Ass			Accept	*N900	<b>040</b>	100	ገ*	Setup	Start Stop	171	S1* S2*
Start Date: Required Date Reference:	6/03/14 : 6/03/14	Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*		Cust Item ID: Customer:						I	
Approvals:	Process Pl	lan:	Date:	Tooling:	Da	ate:			Run	Start	*N	R1*
	QC:		Date:	SPC (Y/N):	Da	ate:				Stop	*N	R2*
Sequence ID/ Work Center I	D	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accep Qty	t Re Qt	-	Reject Number	Insp. Stamp
290 * <b>290</b> * <b>290</b> *		QC21- Final Inspection	Work Order Release	0.00					/	4/	11/3	- 4

Quality Control

Alina L

DQA:			Date:										C <sup>*</sup>	ART
QA Closed:			Date:			WORK ORDER NON	-C(	ONFOI	RMANCE / UF		Vork Order up	date only	¬ ^^	EROSPACE
						DISPOSITION					EPARTMENT,	······································		
Work Orde	er: _					DISPOSITION				AOAMS1 D	—			
						Rework			Skid-tube	Crosstube	_	Water Jet	_	eering
Part N	lo					Scrap			Machining	Small Fab		d. Eng. Coor.	_	Quality
NCR N	۱o					Use-as-is Suspected Unapproved		Thern	noforming Large Fab	Finishing Composite	Rec/Sto	e/Packaging Supplier		Other
Root					Desc	ription of work order update	<u> </u>	Initial	Acti	ion	Sign &		1	
Cause		Date	Step	Qty		or non-conformance	1	ief Eng	Descri		Date	Verification	n   QC	Inspector
Design			<b>'</b>											
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Handling/Pre														
Material									1		-			
Operator													}	
Offset/Setup														
Process														
Supplier														
Training														
Transport														
Unapproved														
							FA	ULT CAT	regory					
Landi	ng G	ear				General		-		_	_		-	
		Bending				Bend		Folio/P	rogram	L	Outside Dim			e/Forced
	$\Box$	Centre No	ot Concer	ntric		BOM/Route	L	Grain			Over/Under	tolerance	Set-up	
		Cracks				Broken/Damage/Defect		Hardwa	ire		Part Incorred	it .	Tempera	ature/Cure
		Crimp/Kir	nk/Ripple	/Wave	L	Burrs	L	Inspecti	ion Incomplete/Un	qualified	Part Lost/Mi	ssing	Weld	
		Cuffs				Contamination		4 .	ions Incomplete/U	nclear	Part Moved		Wrong S	Stock Pulled
		Crushing				Countersink		Misalig	ned/off center		Positioned V	_		
		Heat Trea	at			Cut Too Short		Mislabe	eled		Power Loss/	Surge	Other	<u>=</u> .
		Inspectio	n Strip in	Tube		Drawing		Misread	t			···	71	
		Marks/Ch	natter			Drill Holes		Off-set						
		Turning S	equence			Finish		Out of 0	Calibration					<u>.                                    </u>
	, T	Wave/Tw	ist in Tub	ne .		Fit/Function		Out of 9	Sequence					

Page 1

Work Order ID: 120029

\*120029\*

Parent Item:

D3391-025

\*D3391-025\*

Parent Item Name: Aft Tube Assembly

**Start Date:** 6/03/14

Required Date: 6/03/14

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP Rev B 06-02-07

ECN773 dwg rev. D EC

06-03-28 IPP Rev:C IPP rev D 07.03.20

Update Manuf. Instructions JLM revF dwg EC

IPP rev E 07.11.07

rev G dwg ecn 1053p EC verified by: DD DD verified by: EC

IPP Rev:F 07-11-13

ECN 1056 IPP Rev:G 08-09-10 revH as per dwg DD verified by:EC IPP Rev:H

11.11.14 AS PER REV.I DD verified by:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4095-047		Manufactured	No			260	Each	14.0000	1	1 .	. 1	, (	
*D4095-02 Wearpad Assembly	17*								**		U (	<u>alulo</u>	3
				Location		Loc	<u>Oty</u>	Loc Code					
				FP001			14 1312	0523		У(			
					102241 108289		2 12		_	У (	-		
D4095-049		Manufactured	No		10000	260	Each	9.0000	1	1	-		
*D4095-04 Wearpad Assembly	19*								**		M	14	11/03
				Location		Loc		Loc Code					
				FP001	100670		9 B12	:0445		x (	_		
D6014-090		Manufactured	No		109670	100	Each	63.0000	1	1	-		
*D6014-09 ALUMINUM EXTRUSION	)O*	Manufactured							**				
				Location		Loc	<u>Oty</u>	Loc Code					
				LG003			63				-	( ).(	60/10
					79742) 86063		17 46			1	- _ mn	1. L 19/	108/18

DQA:			Date:			WORK ORDER NON-CONFORMANCE / UPDATE									
QA Closed:			Date:			WORK ORDER NON	-C(	ONFOI	RMANCE / U		ork Order up	odate only		AEROSPACE	
Work Orde	ar.					DISPOSITION				AGAINST D	EPARTMENT	/PROCESS			
Part N	٠ ا. No.				<u> </u>	Rework Scrap Use-as-is Suspected Unapproved		Thern	Skid-tube Machining moforming Large Fab	Crosstube Small Fab Finishing Composite		Water Jet d. Eng. Coor. re/Packaging Supplier		Engineering Quality Other	
Root					Desc	ription of work order update		Initial	Ac	tion	Sign &		$\neg$		
Cause		Date	Step	Qty		or non-conformance	Ch	nief Eng	Desc	ription	Date	Verificatio	n	QC Inspector	
Design Doc/Data Equip/Tooling Handling/Pre Material Operator Offset/Setup Process Supplier Training Transport Unapproved															
опаррточеа							FA	ULT CAT	TEGORY		<u> </u>			· · · · · · · · · · · · · · · · · · ·	
Landi	ng G	iear				General	FA	OLI CAI	IEGONI					W	
		Bending Centre No Cracks Crimp/Kin Cuffs Crushing Heat Trea Inspection Marks/Ch Turning So	nk/Ripple t n Strip in atter	/Wave Tube		Bend BOM/Route Broken/Damage/Defect Burrs Contamination Countersink Cut Too Short Drawing Drill Holes Finish		Grain Hardwa Inspecti Instruct Misalig Mislabe Misread Off-set	ion Incomplete/U tions Incomplete/ gned/off center eled d	· —	Outside Dim Over/Under Part Incorred Part Lost/Mi Part Moved Positioned V Power Loss/	tolerance ct ssing Vrong		Pressure/Forced Set-up Temperature/Cure Weld Wrong Stock Pulled Other	
	Wave/Twist in Tube				Fit/Function		Out of S	Sequence					_		

## **Picklist Print**

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Page 2

Work Order ID: 120029

\*120029\*

Parent Item:

D3391-025

Parent Item Name: Aft Tube Assembly

\*D3391-025\*

**Start Date:** 6/03/14

Required Date: 6/03/14

Start Qty: 1.00

Required Qty: 1.00

D3670-4-200

Manufactured

230

Each 232.0000

\*\*

\*D3670-4-200\*

Bushing

Location Loc Qty FG 10 87709 10 LG001 222 103880 15 109108 206 96240 1 Each

Loc Code

D2646

Manufactured

270

62.0000 \*\*

Aft Cap

Location	Loc Qty	Loc Code	
FG	4		
85848	2		
90495	2		
FP001	58		
103306	3	2016/51	
107857	1	13119656	X (
110816	13		
113830	31		
114495	10		

DQA:	Date:					– TOART									
						WORK ORDER NON-	-C(	RMANCE / UI		(l- Ol		<b>-</b> 7	AEROSPACE		
QA Closed:			Date:					,		<u> </u>	ork Order up	date only			
Work Ord	er.					DISPOSITION				AGAINST D	EPARTMENT	/PROCESS			
WOIK OIG	٠	· · · · · · · · · · · · · · · · · · ·				Rework	1		Skid-tube	Crosstube	7	Water Jet	_ ☐ En	gineering	
Part I	No.					Scrap		1	Machining	Small Fab	Pro	d. Eng. Coor.		Quality	
	•		<del></del>			Use-as-is		1	noforming	Finishing	=	e/Packaging		Other	
NCR I	No.					Suspected Unapproved			Large Fab	Composite		Supplier			
Root					Desc	ription of work order update		Initial	Act	ion	Sign &	<del> </del>	<del></del>		
Cause		Date	Step	Qty		or non-conformance	ı	nief Eng	Descr	iption	Date	Verification		QC Inspector	
Design				•						<u></u>					
Doc/Data															
Equip/Tooling															
Handling/Pre															
Material									:						
Operator									:						
Offset/Setup															
Process															
Supplier															
Training															
Transport							l								
Unapproved											<u> </u>				
						<del></del>	FA	ULT CAT	EGORY					×	
Landi						General	_	1		_	<b>-</b> .		_		
	$\vdash$	Bending			$\vdash$	Bend	<u> </u>	4	rogram		Outside Dim	<b>-</b>	_	sure/Forced	
	$\vdash$	Centre No	ot Concer	ntric	<u> </u>	BOM/Route		Grain		<u> </u>	Over/Under	-	Set-	•	
	⊢	Cracks			<u> </u>	Broken/Damage/Defect	<u> </u>	Hardwa			Part Incorred		_	perature/Cure	
	Crimp/Kink/Ripple/Wave			/Wave		Burrs		4	on Incomplete/Un	· ·	Part Lost/Mi	ssing	Weld		
		Cuffs		<u> </u>	Contamination	<u> </u>	-1	ions Incomplete/U	Inclear	Part Moved	L	Wro	ng Stock Pulled		
	Crushing			Countersink	$\vdash$	-1	ned/off center	<u> </u>	Positioned V	· ·	ارمان				
	Heat Treat			<u> </u>	Cut Too Short	$\vdash$	Mislabe		L	Power Loss/	Surge	Othe	er		
	Inspection Strip in Tube				Drawing	_	Misread	I							
		Marks/Ch			<u> </u>	Drill Holes	_	Off-set							
	<u> </u>	Turning S			<u> </u>	Finish		-1	Calibration						
		Wave/Tw	ist in Tub	e e		Fit/Function	Out of Sequence								

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Page 3

Work Order ID: 120029

\*120029\* \*D3391-025\*

Parent Item:

D3391-025

Parent Item Name: Aft Tube Assembly

**Start Date:** 6/03/14

Required Date: 6/03/14

Start Qty: 1.00

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Required Qty: 1.00

D3672-1

Manufactured

270

Each

1,238.000

\*D3672-1\*

Phenolic Washer

<b>Location</b>	<u>Lo</u>	c Oty	Loc Code		
FG		10			
85222		10			
Return2014		34			
80369		34			
ST060		1194			
103845		4			
112218		500			*
113581		500			
93886		62			XZ
99099		128			
	260	Each	7,504.000	14	14

ALS4-1032-130

AELS4-1032-130 Purchased

No

\*AI S4-1032-130\*

Rivnut

Location		Loc Oty	Loc Code	
FP001		7399		
	M128649	7399		XIV_
ST279		48		
	M128211	48		
st510		57		
	M126109	57		

DQA:			Date:			<b>`</b> `∂ΔRT										
						WORK ORDER NON	-C(	ONFO	RMANCE / U				_	AEROSPACE		
QA Closed:			Date:							W	ork Order up	odate only				
Work Orde	ar.					DISPOSITION				AGAINST DI	EPARTMENT,	/PROCESS				
WOIK OIG	-					Rework	1		Skid-tube	Crosstube	٦	Water Jet	□ F	ngineering		
Part N	No.					Scrap			Machining	Small Fab	Pro	d. Eng. Coor.	┪ ¯	Quality		
	-					Use-as-is		1	noforming	Finishing	-4	re/Packaging		Other		
NCR I	No	1			<b></b>	Suspected Unapproved			Large Fab	Composite	]	Supplier				
											1		-			
Root	- 1	_			Desc	ription of work order update	ı	Initial		ion 	Sign &	\$ 4 a 25 th a 4 th a 3		061		
Cause	$\dashv$	Date	Step	Qty		or non-conformance	Ch	nief Eng	Descr	ription	Date	Verification	<u> </u>	QC Inspector		
Design	Щ															
Doc/Data	-															
Equip/Tooling																
Handling/Pre	$\square$											-				
Material																
Operator														•		
Offset/Setup	$\dashv$															
Process	$\vdash$															
Supplier	Н															
Training	Н											-				
Transport	Н															
Unapproved			<u> </u>		l		FΑ	ULT CAT	TEGORY		1					
Landi	ng G	iear				General		<del></del>					<u> </u>			
	一	Bending				Bend	Г	Telio/P	rogram		Outside Dim	ensions	Pre	ssure/Forced		
	$\boldsymbol{\vdash}$	Centre No	ot Concer	ntric		BOM/Route	厂	Grain	•	ļ —	Over/Under	tolerance	Set	:-up		
	Н	Cracks				Broken/Damage/Defect	Г	Hardwa	ire	ļ —	Part Incorred	n l	Ter	nperature/Cure		
	—	Crimp/Kii	nk/Ripple	/Wave		Burrs		Inspect	ion Incomplete/Ur	nqualified	Part Lost/Mi	ssing	We	ld		
	${f  o}$	Cuffs		•		Contamination		- ·	ions Incomplete/L	· —	Part Moved	1	Wr	ong Stock Pulled		
	_	Crushing				Countersink		-	ned/off center		Positioned V	Vrong				
		Heat Trea	at			Cut Too Short	Г	Mislabe		<u></u>	Power Loss/	Surge	Oth	ner		
		Inspectio	n Strip in	Tube		Drawing		Misread	t	_		_				
		Marks/Ch	natter			Drill Holes		Off-set								
		Turning S	equence			Finish		Out of 0	Calibration							
		Wave/Tw	ist in Tub	ne		Teit/Function	Out of Sequence									

June-03-14 7:12:17 AM

Work Order ID: 120029

Parent Item:

D3391-025

\*AI S4-1032-225\*

Parent Item Name: Aft Tube Assembly

\*120029\* \*D3391-025\*

**Start Date:** 6/03/14

Required Date: 6/03/14

Start Qty: 1.00

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Required Qty: 1.00

ALS4-1032-225

AELS8-1032-225 Purchased

No

270

Each

727.0000

Location	Loc Oty	Loc Code	
FG	30		
M127028	30	M130565	<u></u>
FP001	423		
M128649	423		
ST280	248		
M127028	10		
M128179	238		
st555	26		
M127092	26		

DQA:			Date:				_						DART
QA Closed:			Date:			WORK ORDER NON	-C(	ONFO	RMANCE / UPL		/ork Order up	odate only	AEROSPACE
						DISPOSITION					EPARTMENT,	·	
Work Orde	er: _					·	,			_		_	
						Rework			<del>-</del>	Crosstube	_	Water Jet	Engineering
Part N	۱o					Scrap		1	Machining	Small Fab	_	d. Eng. Coor.	Quality
NCD A	VI =					Use-as-is		Thern	noforming	Finishing	Rec/Stol	re/Packaging	Other
NCR N	vo				<del></del>	Suspected Unapproved	J		Large Fab	Composite		Supplier	
Root					Desc	ription of work order update		Initial	Actio	n	Sign &		
Cause		Date	Step	Qty		or non-conformance	Ch	nief Eng	Descript	tion	Date	Verification	QC Inspector
Design													
Doc/Data													
Equip/Tooling											ļ		
Handling/Pre	Ш												
Material													
Operator	Ш												
Offset/Setup	Ш												
Process	Ш						l						
Supplier	Ш						l						
Training	Ш						ł						
Transport	Ш												
Unapproved					l								
							FA	ULT CAT	TEGORY		-		
Landi					_	General	_	1 .		_	7	F	_
	_	Bending				Bend	<u></u>	4	Program	ļ	Outside Dim		Pressure/Forced
	Ц	Centre No	ot Concer	itric	<u> </u>	BOM/Route	L	Grain			Over/Under	<u> -</u>	Set-up
	Щ	Cracks			<u> </u>	Broken/Damage/Defect		Hardwa		<u> </u>	Part Incorred	<b>⊢</b>	Temperature/Cure
	$\square$	Crimp/Kir	nk/Ripple,	/Wave		Burrs		1 '	ion Incomplete/Unqu	<u> </u>	Part Lost/Mi	ssing	Weld
	Ц	Cuffs				Contamination		4	tions Incomplete/Unc	clear	Part Moved	L	Wrong Stock Pulled
	_	Crushing				Countersink	L	4	ned/off center	<u>_</u>	Positioned V		
		Heat Trea	it			Cut Too Short	$ldsymbol{ldsymbol{ldsymbol{eta}}}$	Mislabe		L	Power Loss/	Surge	Other
	$\square$	Inspection	n Strip in	Tube		Drawing	$ldsymbol{f eta}$	Misread	d				
	$\square$	Marks/Ch	atter			Drill Holes		Off-set					
	╚	Turning S	equence			Finish		Out of 0	Calibration		****		
	Į ŀ	Wave/Tw	ist in Tub	e		Fit/Function	1	Out of 9	Seguence				

Picklist Print June-03-14 7:12:17 AM												Page 5
<b>Work Order ID:</b> 120029 <b>Parent Item:</b> D3391-025			200	2 <u>9</u> * 1-025*							**************************************	
Parent Item Name: Aft Tube Ass	sembly	•	J. 1. 1.	1-(12.)				tart Date: Start Qty:			uired Date: 6 quired Qty: 1	
AN3C4A	Purchased	No			270	Each	2,750.000	6 <b>**</b>	6	9U	1 (	
*AN3C4A*								**		<u>94</u>	<u> </u>	0 >
			Location	<u>on</u>	<u>I</u>	oc Oty	Loc Code					
			FG			20	11174	<i>710</i>				
			_	122814		20	MICE	200	X_(e			
			Return	2014 124221		9 9				<del></del>		
			ST350	124221		13				<u> </u>		
			31330	125388		3			****			
				M128606		6						
				M128739		4						
			ST350/			26						
				M128606		26			<del></del>			
			ST512			3						
				124221		3				<del></del>		
			ST513	M127410		2679				_		
				M127410 M127832		1 62				_		
				M128634		616						
				M128879		2000						
AN3C5A	Purchased	No			270	Each	991.0000	4	4			1
*AN3C5A*								**		H	14/1	1103
			Locatio	<u>n</u>	<u>L</u>	oc Oty	Loc Code					
			FG			5	xx 1303	T6				
				122800		5	14 1202	56	X.4	·		
			ST350			386						
				M128973		186				<u> </u>		
			C/D/4.4.4	M129198		200						
			ST513	M128911		600 600				<del></del>		
				M120/11		000						

Shop Packet Print

Page 5

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DQA:			Date:										TOA!	T
QA Closed:			Date:			WORK ORDER NON-	-C(	ONFO	RMANCE / UI		Vork Order up	odate only	AEROS	PĀCĒ
	٥					DISPOSITION				AGAINST [	EPARTMENT	/PROCESS		
Work Ord Part I	•			·		Rework Scrap			Skid-tube Machining	Crosstube Small Fab	Pro	Water Jet d. Eng. Coor.	Engineering Quality	_
NCR I	•					Use-as-is Suspected Unapproved			noforming Large Fab	Finishing Composite		re/Packaging Supplier	Other	-
Root					Desci	ription of work order update		nitial	Act	ion	Sign &			
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Descr	iption	Date	Verification	QC Inspec	tor
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Doc/Data											İ			
Equip/Tooling		!												
Handling/Pre														
Material							İ							
Operator														
Offset/Setup		1												
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Unapproved														
							FAI	ULT CA	TEGORY					
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		Bending				Bend		Folio/F	Program		Outside Dim	ensions	Pressure/Force	ed
		Centre No	ot Concer	ntric		BOM/Route		Grain			Over/Under	tolerance	Set-up	
		Cracks				Broken/Damage/Defect		Hardwa	are		Part Incorred	ત [_	Temperature/0	Cure
		Crimp/Kir	nk/Ripple	/Wave		Burrs	Г	Inspect	ion Incomplete/Un	qualified	Part Lost/Mi	ssing	Weld	
		Cuffs				Contamination		Instruct	tions Incomplete/U	Inclear	Part Moved		Wrong Stock P	ulled
		Crushing				Countersink		Misalig	ned/off center	Γ	Positioned V	/rong		
		Heat Trea	at			Cut Too Short		Mislabe	eled	Γ	Power Loss/	Surge	Other	
		Inspectio	n Strip in	Tube		Drawing		Misrea	d	_	_			
		Marks/Ch	natter			Drill Holes		Off-set						
		Turning S	equence			Finish		Out of	Calibration					
		Wave/Tw	ist in Tub	e		Fit/Function		Out of	Sequence		-			

June-03-14 7:12:17 AM

Work Order ID: 120029

Parent Item:

D3391-025

Parent Item Name: Aft Tube Assembly

\*120029\* \*D3391-025\*

**Start Date:** 6/03/14

Required Date: 6/03/14

Start Qty: 1.00

Required Qty: 1.00

NAS1149C0332R

Purchased

No

270

Each

5,404.000

10

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\*NAS1149C0332R\* WASHER

<b>Location</b>	Loc Oty	<b>Loc Code</b>	
GA	825	M130325	<u></u>
125654	825	(	
Return2014	41		
122063	41		
ST292	1380		
124580	8		
125654	8		
m128591	1364		
st510	3158		
m126319	61		
m127306	2500		
m127410	563		
m127831	34		

DQA:			Date:		•	WORK ORDER NON-CONFORMANCE / UPDATE							7	DART	
QA Closed:			Date:			WORK ORDER NON	-C(	ONFO	RMANCE /		Work Order u	pdate only		AEROSPACE	
Work Orde	or.					DISPOSITION				AGAINST (	DEPARTMENT/PROCESS				
Part N	۱o.					Rework Scrap Use-as-is Suspected Unapproved		Skid-tube Crosstube  Machining Small Fab  Thermoforming Finishing  Large Fab Composite			Prod. Eng. Coor. Rec/Store/Packaging			Engineering Quality Other	
Root					Desc	ription of work order update	 	nitial	I A	ction	Sign &		Т	<u> </u>	
Cause		Date	Step	Qty		or non-conformance	ı	ief Eng		scription	Date	Verification	,	QC Inspector	
Design Doc/Data Equip/Tooling Handling/Pre Material Operator Offset/Setup Process Supplier Training Transport Unapproved														4	
							FA	ULT CAT	regory						
Landi		Gear Bending Centre No Cracks Crimp/Kir Cuffs Crushing Heat Trea Inspection Marks/Ch	nk/Ripple nt n Strip in	/Wave		General Bend BOM/Route Broken/Damage/Defect Burrs Contamination Countersink Cut Too Short Drawing Drill Holes		Grain Hardwa Inspect Instruct	ion Incomplete/ tions Incomplete gned/off center eled	e/Unclear	Outside Dim Over/Under Part Incorre Part Lost/M Part Moved Positioned \ Power Loss/	tolerance ct issing Vrong	Se Te W W	ressure/Forced et-up emperature/Cure reld rong Stock Pulled	
		Turning S Wave/Tw	equence			Finish Fit/Function		4	Calibration Sequence						

DART AEROSPACE LTD	Work Order:	120029
Description: Float Skidtube (412)	Part Number:	D3391-3
Description: 1 loat Skidtube (412)	Part Number:	D3391-3 ,
Inspection Dwg: D3391 Rev: I'		Page 1-of-1

## FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments	
		La	the Section	n	•	<b>Obs</b>	
14.000	+/-0.010	14.000			tape	6641	
3.500	+/-0.010	3.499	_		vern	CNC-08	
Ø3.200	+/-0.010	3.199			1		
Ø3.750	+/-0.010	3,750	-				
30° x 0.060 chamfer	+/-0.010	30° × .060	/		J	,	
88.93	+/-0.030	88.936			tape	L6-11	

Measured by: 19/08/18

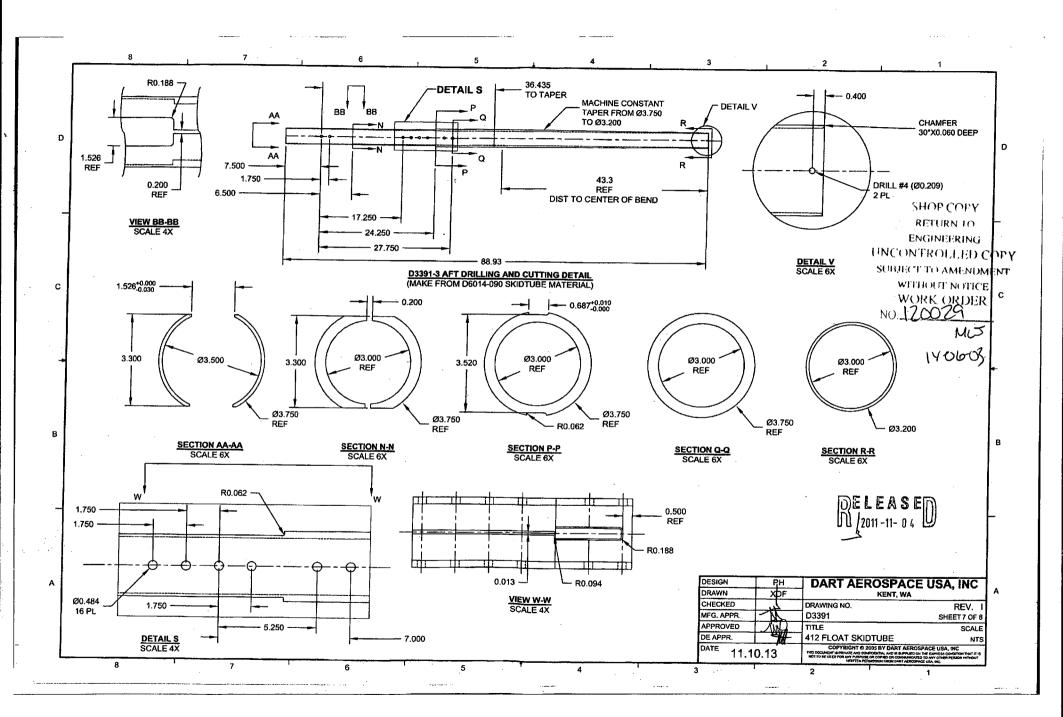
Audited by: 10

Date: 14/08/18

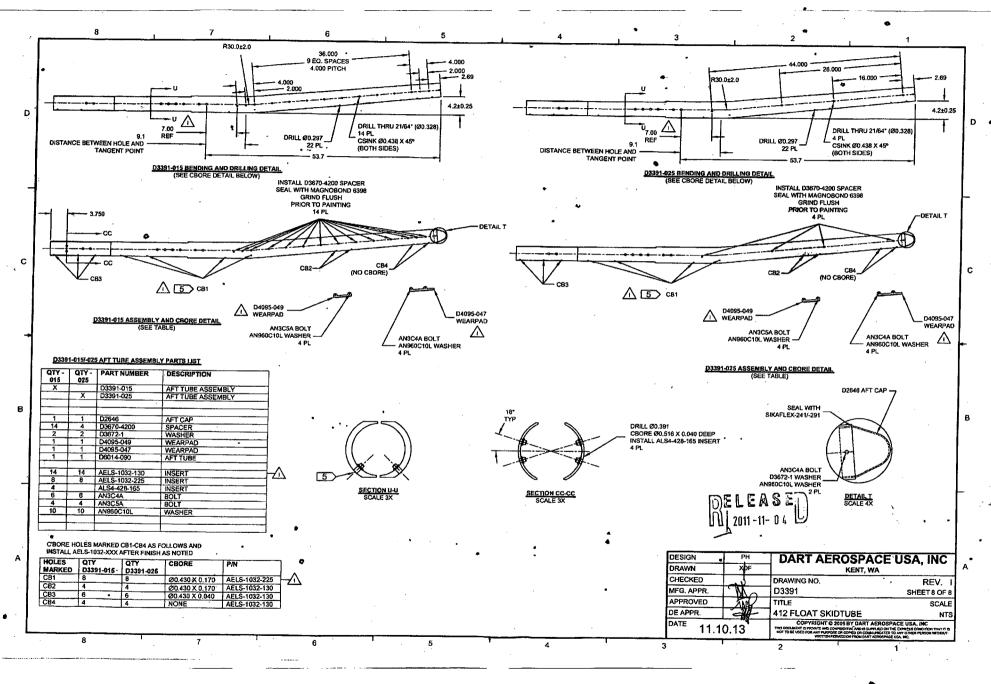
		НА	AS Section		
مر 1.526	+0.000/-0.030	1.500		vern cacoz	
7.500	+/-0.010	7.497		J J	
27.750	+/-0.010	27.749		Hoas I	
31.750	+/-0.010	31.750			
35.250	+/-0.010	35.247		ý	
3.300	+/-0.010	3.295	/	Vera CNC 02	
0.200	+/-0.010	.700			
3.520	+/-0.010	3.510			
0.687	+0.010/-0.000	. 688			
R0.062	+/-0.010	.062			
Ø0.484	+0.005/-0.001	.484		V	

Rev	Date	Change	Revised by	Approved
Α	06.04.24	New Issue P/O D3391-015/-025	KJ/JLM	
В	06.06.19	Dwg revision update	KJ/JLM	
С	07.04.20	Ø0.208 dimension removed	KJ/JLM	
D	07.09.06	0.400 dimension removed	KJ/JLM	
E	07.11.23	Dwg Rev. updated	KJ/EC/DD	
F	09.04.27	Dimensions updated per Rev H and NCR09-028	KJ/JLM	
G	09.11.16	Dimension 0.200 removed	KJ	
Н	11.06.21	Dimension 44.995 removed	KJ	
Ī	12.05.15	Dwg Rev updated	KJ	
J	12.05.23	Dimension updated	KJ	
K	12.10.15	88.93 dimension removed	KJ 10	1.1
L	12.11.28	88.93 dimension added	KJ 😽	<b>M</b>

DQA:	Date:												TOACT
						<b>WORK ORDER NON-</b>	-C(	ONFO	RMANCE / UPDATE			_	AEROSPACE
QA Closed:			Date:							W	ork Order up	odate only	
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·						Rework	1		Skid-tube Crosstub	e 🗀	7	Water Jet	Engineering
Part N	lo.					Scrap			Machining Small Fa	_	Pro	d. Eng. Coor.	Quality
						Use-as-is			noforming Finishir	ng -	=1	re/Packaging	Other
NCR I	۱o.	_			<del></del>	Suspected Unapproved			Large Fab Composi	te		Supplier	
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Operator													
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Process												:	
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				Countersink	_	4	ned/off center		Positioned V	ے Vrong			
		Heat Trea	it			Cut Too Short		Mislabe	•		Power Loss/		Other
	_	Inspection		Tube		Drawing	$\vdash$	Misread		_	<b>-</b>	- <u>-</u>	
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		Wave/Tw	ist in Tub	e		Fit/Function		Out of S	Sequence				



DQA:			Date:												
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				Countersink		-3	gned/off center	Г	Positioned V	Vrong	<b>-</b>				
	Г	Heat Trea	ıt		-	Cut Too Short		Mislabe			Power Loss/	Surge	Other		
	⊢	Inspection		Tube		Drawing		Misread	d		-				
		Marks/Ch	•			Drill Holes		Off-set							
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Wave/Twist in Tube Fit/Function				Fit/Function		Out of									



DQA:		Date:											DART
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Landing	<b>-</b>		1	_	General	г—	l=-1:- /c	<b></b>	•	* F	Outside Dim		Pressure/Forced
-	Bending		- <b></b> -	$\vdash$	Bend BOM/Boute	┢	1	rogram		-	Over/Under	<u> </u>	Set-up
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-	Crushing	***	>	<del> </del>	Countersink	-	1	gned/off o	•	H	Positioned V		7 2 1
	Heat Trea	4:	e.	-	Cut Too Short	$\vdash$	Mislabe		Circi	H	Power Loss/		Other
-	<b>-</b> 1 · · ·		Tube	·	Drawing	$\vdash$	Misread				اردون درون ا		.15.50.5
-	Inspection Strip in Tube Marks/Chatter				Drill Holes	H	Off-set						<u> </u>
	_				Finish		4	Calibration	1				
Turning Sequence Wave/Twist in Tube					Fit/Function		4		Out of Sequence				